[redacted] Claims of record [redacted]

CLAIMS:

1. A blow head mechanism for blowing a parison in a blow mold of a blow station of an I.S. machine and cooling the blown parison so that a bottle will be formed which can be removed from the blow station comprising

a blow head assembly,

support means for supporting said blow head assembly,

first displacement means for displacing said support means to displace said blow head assembly between a remote up position and an advanced down position,

said blow head assembly including a blow tube selectively displaceable between an up position and a down position,

second displacement means for displacing said blow tube from the up position down to the down position and then back up to the up position at least one time during the time the parison is blown and cooled,

said blow tube being open at the bottom,

an air deflector having an annular, concave surface terminating at the top with a vertically extending post for deflecting air travelling axially down the blow tube uniformly radially outwardly and

a supporting frame for supporting said air deflector proximate the open bottom of said blow tube.

2. A blow head mechanism for blowing a parison in a blow mold of a blow station of an I.S. machine and cooling the blown parison so that a bottle will be formed which can be removed from the blow station according to claim 1, wherein said supporting frame supports said vertically extending post coaxial with the axis of the blow tube.

3. A blow head mechanism for blowing a parison in a blow mold of a blow station of an I.S. machine and cooling the blown parison so that a bottle will be formed

which can be removed from the blow station according to claim 2, wherein the open bottom of said blow tube has an annular recess and said supporting frame includes an annular flange to be press fit into the annular recess and a plurality of struts connecting the top of the vertically extending post to said annular flange.

4. A blow head mechanism for cooling a formed bottle comprising

a blow head assembly,

support means for supporting said blow head assembly,

first displacement means for displacing said support means to displace said blow head assembly between a remote up position and an advanced down position,

said blow head assembly including a blow tube selectively displaceable between an up position and a down position,

second displacement means for displacing said blow tube from the up position down to the down position and then back up to the up position at least one time during the time the bottle is cooled,

said cooling tube being open at the bottom,

an air deflector having an annular, concave surface terminating at the top with a vertically extending post for deflecting air travelling axially down the blow tube uniformly radially outwardly and

a supporting frame for supporting said air deflector proximate the open bottom of said blow tube.

Proposed After-Final Amendment
claims

CLAIM AMENDMENTS

1(original). A blow head mechanism for blowing a parison in a blow mold of an I.S. machine and cooling the blown parison so that a bottle will be formed which can be removed from the blow mold comprising

a blow head assembly,

support means for supporting said blow head assembly,

first displacement means for displacing said support means to displace said blow head assembly between a remote "off" position and an advanced "on" position,

said blow head assembly including a blow tube selectively displaceable between an up position and a down position,

second displacement means for displacing said blow tube from the up position to the down position and then back up to the up position a plurality of times during the time that the blow head assembly is at the "on" position,

said second displacement means including a profiled actuator.

2(original). A blow head mechanism according to claim 1, wherein said profiled actuator is a servomotor.

3(currently amended). A blow head mechanism according to claim 1, wherein the profile of the profiled actuator displaces the cooling tube in coordination with the cooling requirements of blown parison/formed bottle.

4(original). A blow head mechanism according to claim 1, wherein the blown parison has an upper neck portion and a lower body portion, said profiled actuator including a displacement profile which will displace the blow tube from the up position to the location where the upper neck portion meets the lower body portion at an average velocity higher than the average velocity at which the blow tube will be displaced from the location where the upper neck portion meets the lower body portion to the bottom of the blown parison.

5(original). A blow head mechanism according to claim 4, wherein said displacement profile will cause said blow tube to dwell at the bottom of the blown parison for a selected period of time.

6(currently amended). A blow head mechanism according to claim 5 wherein the displacement profile will displace the blow tube from the down position to the location where the upper neck portion meets the lower body portion at said average lower velocity and will displace the blow tube from the location where the upper neck

portion meets the lower body portion to the up position at said higher average velocity.